Cyfoeth Naturiol Cymru
Natural Resources Wales

Form

Record of a Habitats Regulations Assessment of a project

March 2016

OGN 200 Form 1

Document owner: Protected Sites Team, KSP

Version History:

Document Version	Date Published	Summary of Changes
1.0	March 2016	Document created

Review Date: February 2017

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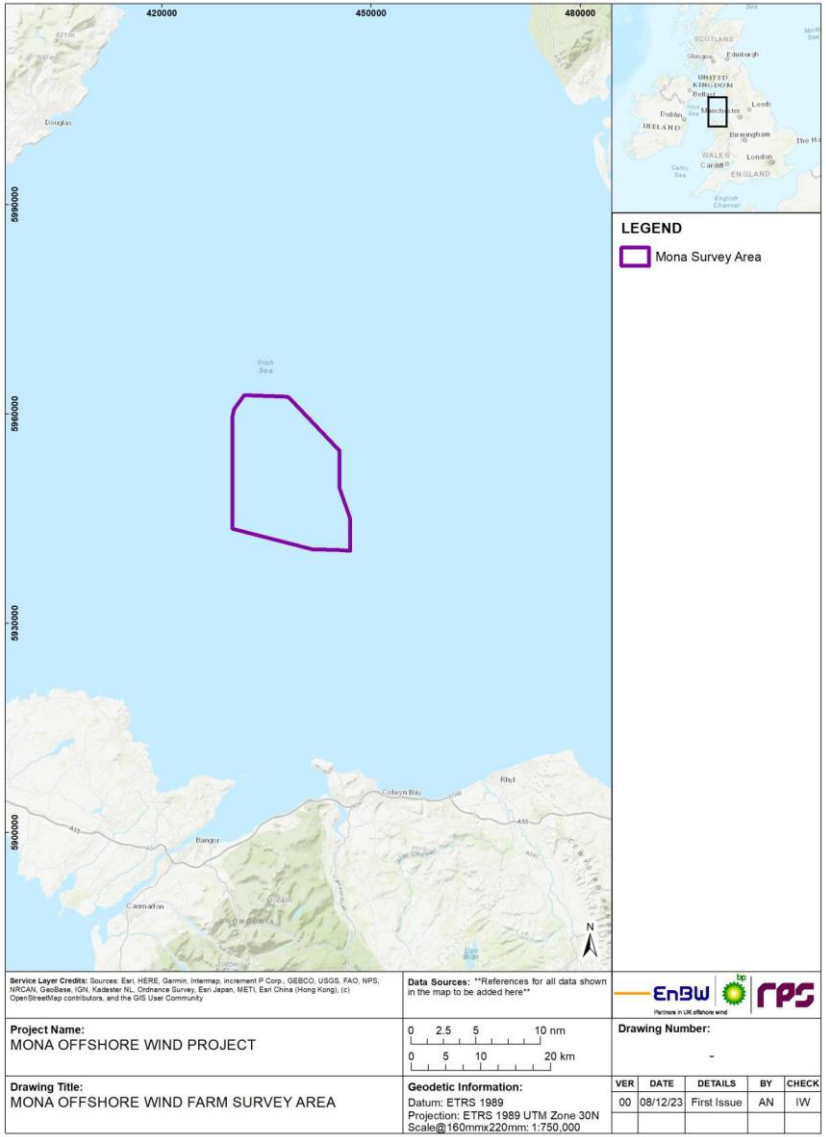
Contents

1. Project Details

1(a): Project details where an external party has applied to NRW for any form of authorisation	
Application reference number (if applicable)	RML2508
Date application received	24 January 2025
Applicant details	Mona Offshore Wind Limited
Activity proposed	To inform the development of the Morgan and Mona Offshore Wind Farms, in the Irish Sea, BP and EnBW intend to carry out geotechnical investigations of both the Mona and Morgan Array Areas Bp and EnBW currently have an existing licence, RML2444, for up to 80 deep boreholes within the Mona Array Area. The surveys proposed are in addition to those being conducted under RML2444 and are as follows: Up to 25 additional deep geotechnical boreholes up to 90m depth below seabed, including: • Composite boreholes with downhole in situ testing, • And the option for Discretionary Pore Pressure Dissipation Tests (PPDT) and High Pressure Dilatometer (HPD) downhole Pressuremeter. Up to 750 shallow geotechnical samples up to 6m below seabed, including: • Vibrocore (or piston core), • Piezo-Cone Penetrometer Testing (PCPT), and • Thermal Resistivity Testing (TRT). The deep geotechnical surveys are planned to be undertaken between 19 March 2025, over a total duration of 37 weeks, until 03 December 2025. Most of the deep boreholes will be undertaken under the existing licence RML2444 which expires 17 September 2025. It is anticipated that the additional 25 boreholes will take approximately 14 weeks to complete. The shallow geotechnical investigations are planned to be undertaken between 30 April 2025 over a duration of 20.5 weeks, until 15 September 2025. However, a licence is requested from 01 March 2025 extending until 01 March 2026 to allow contingency in the programme should the survey be delayed, for example, due to weather downtime.
Relevant legislation	Marine and Coastal Access Act 2009

Location	Mona offshore wind site, North Wales



Application documents	RML2508 - eng-marine-works-licence-application v1.0.docx RML2508 - 20241120_MonaArrayMarineLicenseArea.pdf RML2508 - eng-marine-inns-biosecurity-ra-and-management-plan v1.0.docx RML2508 - MO_ArrayLicenseMarineArea.xlsx RML2508 - Mona Geotechnical Survey SID v2.0.docx RML2508 - WFD Assessment Geotechnical Boreholes 2025 v2.0.docx
Environmental Statement	N/A
Pre-application correspondence	N/A
NRW team responsible for drafting this HRA report, and name of lead officer	Jack Thompson - Marine Licensing Team

2. Determining the need for a Habitats Regulations Assessment

2.1 Is the whole of the project directly connected with or necessary to the management of one or more Natura 2000 sites, for the purposes of conserving the habitats or species for which the Natura 2000 site(s) is/are designated?	No
2.2 Is there a possibility that the project could affect a different Natura 2000 site to the one(s) the project is intended to conserve?	N/A
2.3 Is it necessary to carry out an HRA?	Yes

Considering the likelihood of a significant effect (LSE)

3.1 Renewal of a permission on the same or more restrictive terms as the extant permission

Is this project a renewal of a current permission which complies with NRW approved criteria for ruling out significant effects of renewals (see section 6.2A of OGN 200) without conducting a project-specific LSE test?	No

3.2 Likelihood of significant effects (LSE) test

3.2.1 Which Natura 2000 sites might be affected by the proposal?	Based on the project specification or information provided in the application, it is considered that the following Natura 2000 sites have features which could be affected by the project: We understand that the survey area is located within the Irish Sea and does not overlap with any marine mammal protected site. However, considering the mobile nature of all Annex II marine mammal features of protected sites, the Marine Mammal Management Unit approach has been taken. The closest SAC for marine mammals is the harbour porpoise site **North Anglesey Marine/ Gogledd Môn Forol SAC** at a distance of 22.6 km. Other harbour porpoise sites within the MMMU are **Gorllewin Cymru Forol / West Wales Marine SAC** and **Dynesfeydd Môr Hafren / Bristol Channel Approaches SAC** The following sites have also been considered: for bottlenose dolphin **Pen Llŷn a'r Sarnau SAC** and **Bae Ceredigion / Cardigan Bay SAC**; and for grey seal **Pen Llŷn a'r Sarnau SAC, Bae Ceredigion / Cardigan Bay SAC** and **Sir Benfro Forol / Pembrokeshire Marine SAC**. The **North Anglesey Marine** SAC is the closest Harbour Porpoise SAC and therefore, by inference/iterative assessment, a similar conclusion can be made for Harbour porpoise SACs further away. Given the localised and temporary impact, any impacts on other marine mammals (all of which are less abundant in the study area) would be negligible. **Liverpool Bay SPA**

3.2.2 Screening assessment

There is no impact pathway from the proposal to the designated feature.
There is an impact pathway in principle, but significant effects from the proposal when considered alone can be ruled out.
There is an impact pathway and significant effects cannot be ruled out.

	Assessment of likelihood of significant effect	
	I **Relevant conservation objectives**	**II** **Potential impact pathway**

North Anglesey Marine SAC *(closest site at 22.6 km)* **Gorllewin Cymru Forol / West Wales Marine SAC** **Dynesfeydd Môr Hafren / Bristol Channel Approaches SAC**		
Harbour Porpoise (Phocoena phocaena)	North Anglesey Marine pSAC: Draft Conservation Objectives and Advice on Activities (naturalresources.wales) West Wales Marine pSAC: Draft Conservation Objectives and Advice on Activities (naturalresources.wales) Bristol Channel Approaches pSAC: Draft Conservation Objectives and Advice on Activites (naturalresources.wales)	This application is for the removal of sediment and bedrock material through borehole and vibrocore/piston core geotechnical site investigation works. Up to 25 boreholes and 750 vibrocores/piston cores are expected to be taken. The proposed survey may cause acoustic disturbance during survey activities and disturbance from the presence of vessels. The survey area is located within the Celtic and Irish Seas harbour porpoise Marine Mammal Management Unit (MMMU), and the closest SAC is North Anglesey Marine/ Gogledd Môn Forol SAC at a distance of 22.6 km. Geotechnical drilling (rotary) typically generates noise levels between 2Hz – 50kHz at 160 dB re 1µPa @ 1m, whilst a suitable proxy noise source level for vibrocoring is approximately 187.4 dB re 1 µPa @ 1m. (Chorney et al., 2011), both of which are within the hearing range of species such as grey seal, mid-frequency dolphin species (bottlenose, common, Risso's) and harbour porpoise (as per NMFS 2018; Southall et al 2019; Tougaard 2021). However, the survey area is located at a reasonable distance from the closest SAC, North Anglesey Marine, which is 22.6km away. Moreover, the licensed activities will be short lived, and noise will be mostly generated near or in the sediment resulting in much reduced noise levels. Literature on behavioural disturbance from rotary drilling is sparse, and therefore, if we assume that drilling has similar properties to dredging activity, disturbance of marine mammals could realistically occur between 400m – 7 km from the noise source. Assuming a precautionary disturbance radius of 7 km, this will not overlap with the North Anglesey Marine SAC and thus there is no plausible impact on the conservation objectives of the site related to

		disturbance “preventing their use of significant parts of the site (disturbance / displacement)”. Hence, we can conclude no likely significant effect.
Pen Llŷn a’r Sarnau SAC **Bae Ceredigion / Cardigan North SAC**		
Bottlenose dolphin **Grey Seal**	Pen Llŷn a’r Sarnau / Lleyn Peninsula and the Sarnau Conservation Objectives Contents (naturalresources.wales) Bae Ceredigion / Cardigan North Conservation Objectives Contents (naturalresources.wales)	This application is for the removal of sediment and bedrock material through borehole and vibrocore/piston core geotechnical site investigation works. Up to 25 boreholes and 750 vibrocores/piston cores are expected to be taken. The proposed survey may cause acoustic disturbance during survey activities and disturbance from the presence of vessels. The survey area is located within the grey seals and bottle nose dolphin Marine Mammal Management Unit (MMMU), and the closest SAC for both species is the Pen Llŷn a’r Sarnau / Lleyn Peninsula SAC. Geotechnical drilling (rotary) typically generates noise levels between 2Hz – 50kHz at 160 dB re 1µPa @ 1m, whilst a suitable proxy noise source level for vibrocoring is approximately 187.4 dB re 1 µPa @ 1m. (Chorney et al., 2011), both of which are within the hearing range of species such as grey seal, mid-frequency dolphin species (bottlenose, common, Risso’s) and harbour porpoise (as per NMFS 2018; Southall et al 2019; Tougaard 2021). However, the survey area is located at a considerable distance from any of the SACs. Moreover, the licensed activities will be short lived, and noise will be mostly generated near or in the sediment resulting in much reduced noise levels. Furthermore, bottlenose dolphins in Welsh waters have been recorded most frequently in the coastal zone (NRW, 2018) and as a result of the location of the works, the potential for overlap with areas of high density is reduced (Evans & Waggit 2023).

		In addition, both species have an array of alternative habitat that remains available to them within the relevant Marine Mammal Management Untit (MMMU). As such, no LSE is expected.
Sir Benfro Forol / Pembrokeshire Marine SAC		
Grey Seal	Pembrokeshire Marine Conservation Objectives Contents (naturalresources.wales)	This application is for the removal of sediment and bedrock material through borehole and vibrocore/piston core geotechnical site investigation works. Up to 25 boreholes and 750 vibrocores/piston cores are expected to be taken. The proposed survey may cause acoustic disturbance during survey activities and disturbance from the presence of vessels. The survey area is located within the grey seals Marine Mammal Management Unit (MMMU), and the closest SAC for the species is the Pen Llŷn a'r Sarnau / Lleyn Peninsula SAC. Geotechnical drilling (rotary) typically generates noise levels between 2Hz – 50kHz at 160 dB re 1µPa @ 1m, whilst a suitable proxy noise source level for vibrocoring is approximately 187.4 dB re 1 µPa @ 1m. (Chorney et al., 2011), both of which are within the hearing range of species such as grey seal, mid-frequency dolphin species (bottlenose, common, Risso's) and harbour porpoise (as per NMFS 2018; Southall et al 2019; Tougaard 2021). However, the survey area is located at a considerable distance from any of the SACs. Moreover, the licensed activities will be short lived, and noise will be mostly generated near or in the sediment resulting in much reduced noise levels. In addition, there is an array of alternative habitat that remains available to grey seals within the relevant Marine Mammal Management Unit (MMMU). As such, no LSE is expected.
Liverpool Bay / Bae Lerpwl SPA		
Red-throated diver *Gavia stellata* (in non-breeding season)	NRW, Natural England and JNCC conservation objectives:	The Liverpool Bay SPA is over 10km away and as such, no direct impacts from the geotechnical investigation works are expected.

	liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	However, there is the potential for disturbance or displacement if vessels transit through the SPA.
Little gull *Hydrocoloeus minutus* (in non-breeding season)	NRW, Natural England and JNCC conservation objectives: liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	
Common scoter *Melanitta nigra* (in non-breeding season)	NRW, Natural England and JNCC conservation objectives: liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	
Little tern *Sternula albifrons* (in breeding season)	NRW, Natural England and JNCC conservation objectives: liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	
Common tern *Sterna hirundo* (in breeding season)	NRW, Natural England and JNCC conservation objectives: liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	
Waterbird assemblage	NRW, Natural England and JNCC conservation objectives: liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales)	

3.2.3 Screening decision of the project 'alone'

(a) If ALL rows in column II of Table 3.2.2 are GREEN	

	~~The project is not likely to have a significant effect on any Natura 2000 site, because there is no impact pathway from the project to any Natura 2000 features, and no further consideration under the Habitats Directive/Regulations is required in order to determine the application.~~
~~(b) If there are NO rows coloured RED in column II of Table 3.2.2, and there are ANY rows which are BLUE~~	~~The project is not likely to have a significant effect on any Natura 2000 sites when considered alone, but the possibility of significant effects in combination with other plans and projects needs to be considered.~~
(c) If ANY rows in Column II of Table 3.2.2 are RED	The project is likely to have a significant effect on one or more Natura 2000 sites and therefore an appropriate assessment is required.

4. Appropriate assessment of the plan or project when considered alone

4.1 Assessment of plan or project as defined

Table 4.1 Appropriate assessment

European site feature/s	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out? 'YES' or 'NO'
European site name: Liverpool Bay SPA			
Red-throated diver *Gavia stellata* (in non-breeding season)	The movement of vessels through the SPA has the potential to disturb or displace birds.	Disturbance or displacement of birds undermines the conservation objectives which seek to maintain or enhance their populations. Of the classified populations listed for this site, red-throated diver is considered the most sensitive to disturbance or displacement from vessel presence.	Yes
Little gull *Hydrocoloeus*			

minutus (in non-breeding season) Common scoter *Melanitta nigra* (in non-breeding season) Little tern *Sternula albifrons* (in breeding season) Common tern *Sterna hirundo* (in breeding season) Waterbird assemblage		SNCB advice currently states that disturbance to this species may occur within a range of 10 km (JNCC, 2022). As such, it is considered there is minimal risk of visual disturbance/displacement from the survey itself as it will be undertaken at least 10km from Liverpool Bay SPA. Ports for use during the survey are not yet confirmed. However, the preferred ports are currently as follows: - Barrow - preferred port for Gardline Horizon Geodrill and Gardline Observer and possibly Gardline Reliance, although this is to be confirmed for this vessel; - Holyhead - preferred port for Fugro Synergy; and - Liverpool is a reserve/alternate port (for all vessels). Of these ports, only the Port of Liverpool (if it is used at all) will involve vessels to transiting through the Liverpool Bay SPA. Based on port calls once every 28 days throughout the total survey duration for all four vessels, this will equate to a maximum (as the worst case scenario) number of vessel transits of 115 through the Liverpool Bay SPA (equating to up to 48 November-March inclusive). However, the likely number of vessel transits will be much lower as the Port of Liverpool is a reserve/alternate port and may not be needed by all (if any) of the vessels. It should be noted that although the licence period extends for a whole year, works will most likely be undertaken during the summer months, thereby avoiding the overwintering period (November-March, inclusive). However, a licence period of 01 March 2025 extending until 01 March 2026 has been requested to allow contingency in the programme should the survey be delayed.	

		Furthermore, best practice vessel management measures will be adhered to, including: - Adhering to the Wildlife Safe (WiSe) Scheme - Use of regular vessel transit routes which follow, where possible, established shipping routes to minimise disturbance - Where it is necessary for vessels to go outside of established navigational routes during transit to/from port and working areas, routes will be pre-selected to avoid locations where birds are known to aggregate and visible aggregations of rafting birds (inside or outside of the Liverpool Bay/Bae Lerpwl SPA) will be actively avoided within the limitations of vessel safety and manoeuvrability.	

4.3 Concluding the appropriate assessment of the plan or project alone

Table 4.3 Conclusion of the appropriate assessment alone	
(a) If Table 4.1, or the right hand column of Table 4.2 if applicable, is 'YES' for all features	**It has been ascertained that the plan or project, when considered alone, will not adversely affect the integrity of any European sites.**
~~**(b) If there are any 'NO's in the right hand column of Table 4.2**~~	~~**It has not been ascertained that the plan or project, when considered alone, will not adversely affect the integrity of one or more European sites.**~~
(c) Are there are any residual effects of the plan or project (net of mitigation measures) which, though not adverse on their own, could be significant when considered in combination with the effects of other plans or projects?	No

6. Conclusion

HRA is not required because the whole of the project is directly connected with or necessary to the management of one or more Natura 2000/Ramsar sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, and the project is not likely to have a significant effect on any other Natura 2000/Ramsar sites. **(As documented in section 2.1 and 2.2 of this form)**	
HRA is not required because there is no conceivable impact pathway to any Natura 2000/Ramsar site **(As documented in section 2.3 of this form)**	
This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out significant effects of a renewal without conducting a project-specific LSE test. Therefore it is considered not likely to have a significant effect on any Natura 2000/Ramsar sites, either alone or in-combination with other plans and projects. **(As documented in section 3.1 of this form)**	
The project has been screened for likelihood of significant effects and, taking account of the advice received from protected sites advisors, is considered not likely to have a significant effect on any Natura 2000/Ramsar site **(As documented in section 3.2 of this form, or section 5 if applicable)**	
In light of the conclusions of an appropriate assessment, and taking account of the advice received from protected sites advisors, it has been established that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans and projects. **(As documented in section 4 of this form, and section 5 if applicable)**	**X**
In light of the conclusions of the appropriate assessment, it has not been ascertained that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, as documented in section 4 of this form, and section 5 is applicable. **Approval for the project cannot be given unless either:** • **the project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of adverse effects, and a revised HRA report is prepared, or**	

• **the project satisfies the requirements of Article 6(4) of the Habitats Directive, an Article 6(4) Statement of Case is prepared (OGN 200 Form 3) and submitted for consideration by the appropriate authority, normally Welsh Ministers**	

Signed: 

Name: Jack Thompson

Position: Marine Licensing Officer

Date: 06 March 2025

7. Consultation with protected sites advisor(s) and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.

Relevant section of the HRA report	Date(s) of correspondence* and any meeting(s) with protected sites advisor(s)	Description of how the comments from protected sites advisors have been taken into account
3	16 April 2025	NRW (A) requested that the effects of vessels transiting through the SPA be considered due to the potential for disturbance/displacement. Subsequently, the HRA has been updated.
4	05 June 2025	HRA was updated to include Liverpool Bay SPA and assessment of transiting vessels was included at AA. Mitigation provided by the applicant was included and NRW Advisory agree with the conclusion that the project will not adversely affect the integrity of the SPA. The Screening Decision in Section 3.2.3 has also been updated to reflect that AA was required. The proxy noise source level for vibrocoring has been included in the LSE assessment.

Appropriate nature conservation body (ANCB) response to an internal HRA consultation

This form should be completed by the team or individual providing the ANCB advice to the competent authority team

TO: Jack Thomas, Marine Licensing Team

FROM: Paige Minahan, Marine Area Advice and Management Team

SUBJECT: Habitats Regulations Assessment of Geotechnical Surveys associated with Mona OWF.

Thank you for consulting Marine Area Advice and Management Team on the above. Our comments are as follows:

In relation to marine ornithology features, we are unable to agree with the conclusions of the HRA at present. We request consideration of transiting survey vessels to be included within the HRA, and if applicable, proposed mitigation to offset any impacts to the relevant designated sites. Please see associated consultation memo for further details.

Signed: Paige Minahan

Date: 16/04/2025

Appropriate nature conservation body (ANCB) response to an internal HRA consultation

This form should be completed by the team or individual providing the ANCB advice to the competent authority team

TO: Jack Thomas, Marine Licensing Team

FROM: Bridget Randall-Smith, Marine Area Management and Advice Team **SUBJECT:** Habitats Regulations Assessment of Geotechnical Surveys associated with Mona OWF.

Thank you for consulting Marine Area Advice and Management Team on the above. Our comments are as follows:

NRW Advisory (A) welcome the additional information provided in the HRA around the port locations and the additional mitigation measures committed to regarding vessel movements through Liverpool Bay SPA. Based on this, NRW (A) can agree that there would be no Adverse Effect on Site Integrity (AEoSI) to the features of Liverpool Bay SPA.

However, NRW (A) wish to highlight that the Screening Decision in Section 3.2.3: Screening decision of the project 'alone', does not appear to have been updated to reflect the Likelihood of Significant Effect (LSE) to Liverpool SPA and the need to be taken through to Appropriate Assessment.

Signed:

BJRandall-Smith

Bridget Randall-Smith
Senior Marine Advisory Officer
Marine Area Advice and Management Team
Date:05/06/2025